

## STUDIES ON SOME SPIDERS OF THE FAMILY GNAPHOSIDAE, FROM INDIA

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### INTRODUCTION

SPIDERS of the family Gnaphosidae have received scant attention in the Oriental Region and even representative works like *Fauna of British India, Arachnida*, by Pocock (1900), *Spiders of Burma* by Thorell (1895) and *Malaysian Spiders* by Workman (1896) contain no references to this family. Recently, I have described some new species of spiders belonging to the genera *Drassodes*, *Scotophaeus*, *Phaeocedus* and *Gnaphosa* (1962, 1964, 1966) of the family Gnaphosidae.

The author, while examining the material of spiders preserved in the Zoological Survey of India, Western Regional Station, Poona, came across several new species of Gnaphosid spiders, some of which have since been described by me elsewhere. The present paper contains descriptions of two more new species of this family belonging to the genera *Gnaphosa* and *Drassodes*, occurring in West Bengal as well as Maharashtra, India.

All type specimens will be deposited in due course in the collection of the Zoological Survey of India, Calcutta.

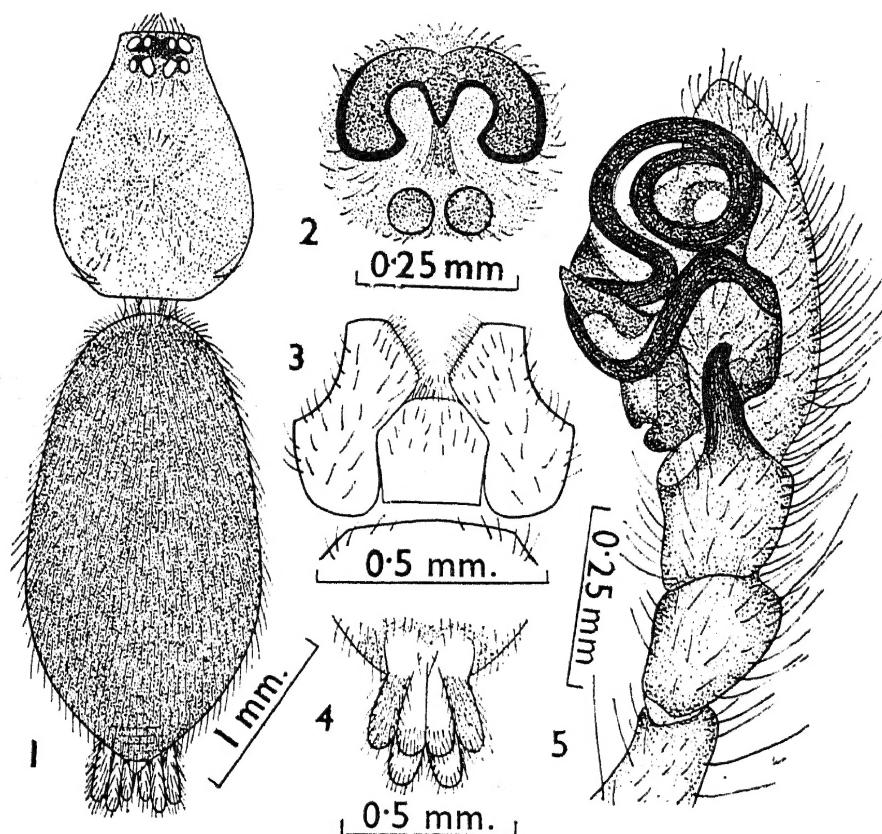
### *Drassodes oppenheimeri* sp. nov.\*

*General*.—Cephalothorax and legs brownish-green, abdomen deep brown. Total length 4.50 mm. Carapace 1.60 mm long, 1.20 mm wide; abdomen 2.90 mm long, 1.40 mm wide.

*Cephalothorax*.—Longer than wide, rather flat, clothed with fine hairs and few spines and with a fine fovea. Eyes anterior row slightly procurved (as seen from in front); medians smaller than laterals, black, and a little closer to the laterals than to each other. Posterior row longer, slightly

\* It is with much pleasure that I name this species after Dr. John R. Oppenheimer, Johns Hopkins University Centre, West Bengal, who collected this spider from West Bengal,

procurred; medians nearly oval and silvery colour, and larger than the laterals and much closer to lateral than to each other. Sternum heart-shaped pointed behind, clothed with spine-like hairs. Maxillae and labium as in Fig. 3. Chelicerae not strong, nearly vertical, one small tooth on inner margin and three on the outer margin. Legs long, moderately strong, clothed with hairs and few spines. I and II pairs of legs longer than others, legs formula 1243. Male palp as in Fig. 5.



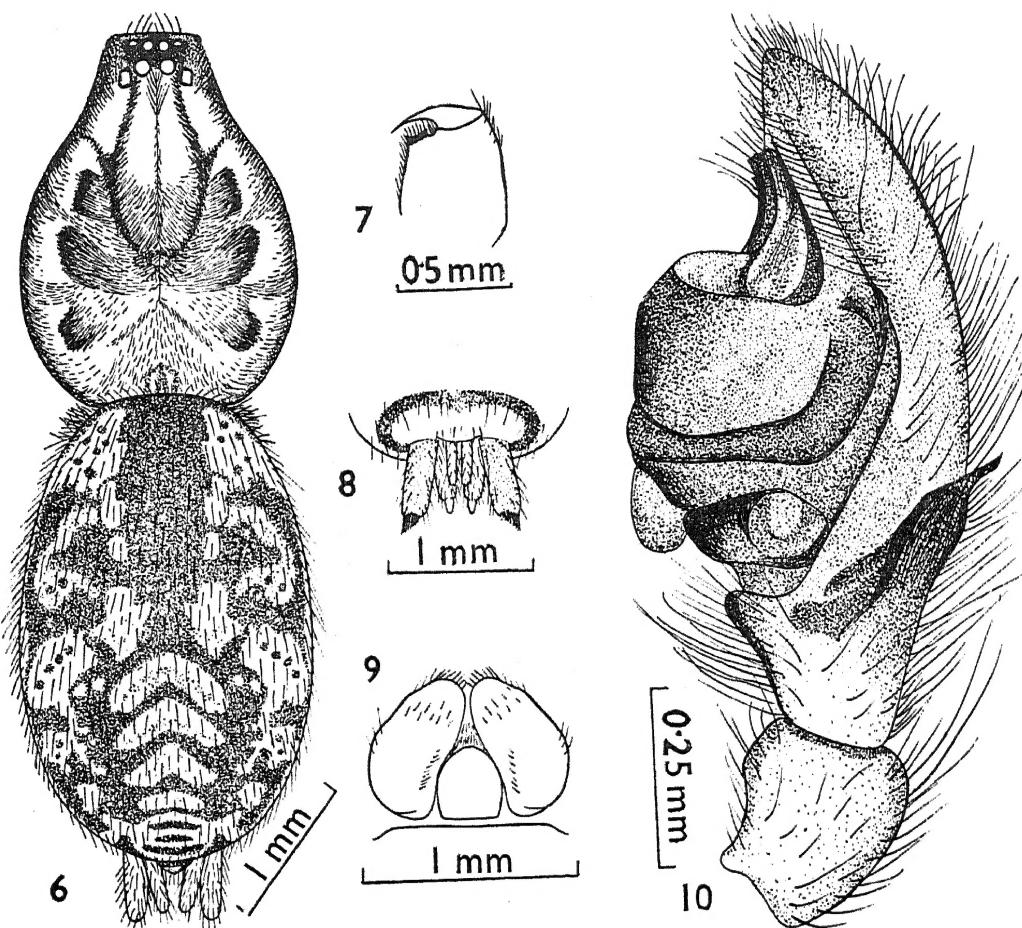
Figs. 1-5. *Drassodes oppenheimeri* sp. nov. Fig. 1. Dorsal view of female, legs omitted. Fig. 2. Epigyne. Fig. 3. Maxillae and labium. Fig. 4. Spinnerets. Fig. 5. Male palp.

**Abdomen.**—Longer than wide, nearly oval clothed with fine brown hairs. Anterior end of abdomen provided with conspicuous thick hairs. Ventral surface uniform pale colour. Spinnerets as in Fig. 4. Epigyne as in Fig. 2.

**Type-specimens.**—Holotype one female, paratype eight females, allotype two males.

**Type-locality**—Singur, Dist. Hoogly, West Bengal, Coll. Dr. John R. Oppenheimer, 16-6-1972.

This species closely resembles *Drassodes malodes* Tikader, but differs as follows:—(i) Abdomen nearly oval-shaped but in *D. malodes* abdomen anterolateral corner slightly angular. (ii) Epigyne also structurally different.



Figs. 6–10. *Gnaphosa poonaensis* sp. nov. Fig. 6. Dorsal view of male, legs omitted. Fig. 7. Chelicera. Fig. 8. Spinnerets. Fig. 9. Maxillae and labium. Fig. 10. Male palp.

#### *Gnaphosa poonaensis* sp. nov.

**General.**—Cephalothorax and legs brownish-green; abdomen deep brown. Total length 5.90 mm. Carapace 2.50 mm. long, 1.90 mm. wide; abdomen 3.50 mm. long, 2.00 mm. wide.

**Cephalothorax.**—Longer than wide, narrowing in front, flat, slightly convex with a fine fovea, clothed with fine hairs and a deep brown narrow line encircling almost the entire border of cephalothorax, the tufts of dark brownish hairs on the cephalothorax as in Fig. 6. Eyes anterior row slightly procurved and almost equal in size; posterior row recurved, longer

and larger in size than anterior rows of eyes. Posterior median eyes conspicuously silvery white in colour and not round in shape. Sternum heart-shaped pointed behind, clothed with hairs. Maxillae and Labium as in Fig. 9. Chelicerae not strong and inner margin provided with a chitinous ridge as in Fig. 7. Legs long stout, clothed with hairs and spines. Legs formula 1423. Male palp well developed as in Fig. 10.

*Abdomen*.—Nearly elliptical covered with brown hairs and posterior half of abdomen with a whitish chevrons as in Fig. 6. Ventral side uniform pale colour. Spinners as in Fig. 8.

*Type-specimen*.—Holotype one male.

*Type-locality*.—Mukundnagar Colony, Poona, Maharashtra, India. Coll. B. K. Tikader, 12–10–1972.

This species resembles *Gnaphosa kailana* Tikader but is separated as follows: (i) The colour pattern of cephalothorax and abdomen is different from that of *G. kailana*. (ii) Maxillae and labium also structurally different.

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#### REFERENCES

- Comstock, J. H. .. *The Spider Book*, New York, 1940, pp. 321–35.
- Locket, G. H. and Millidge, A. F. .. *British Spiders*, Ray Society, London, 1951, 1, 95–123.
- Pocock, R. I. .. *Fauna of British India, Arachnida*, London, 1900.
- Thorell, T. .. *Spiders of Burma*, London, 1895.
- Tikader, B. K. .. “On two new species of spiders of the genera *Scotophaeus* and *Drassodes* (Family Gnaphosidae) from India,” *Proc. All India Congress of Zoology*, 1962, 2, 570–73.
- \_\_\_\_\_. .. “Zoological results of the Indian Cho-Oyu Expedition (1958) in Nepal, Part 8, Arachnida,” *Rec. Indian Mus.*, 1964, 59 (3), 257–67.
- \_\_\_\_\_. .. “On a collection of spiders (Araneae) from the desert area of Rajasthan (India),” *Ibid.*, 1966, 59 (4), 435–43.
- Workman, T. .. *Malaysian Spiders*, Belfast, 1896.